FACT SHEET



SCENARIO ANALYSIS

How the climate changes in the future depends on future emissions of greenhouse gases (GHGs) and other pollutants, which in turn depend upon how population, economies, energy technologies and societies develop. The <u>Intergovernmental Panel on Climate Change Special Report on Emissions Scenarios</u> developed a range of projections of possible future emissions. The Scenario Analysis will include an evaluation of scenarios that span nearly the full range developed by the IPCC. An initial report on the scenario analysis will be submitted to the Governor and Legislature in January 2006.

For each of the scenarios evaluated, we will consider:

- 1) *The impact on water resources.* This effort will build on the work done for the California Water Plan and independent work by the Scripps Institute and California universities.
- 2) The impact on agriculture. This effort will focus on the impact of changes in micro climates within the state, the altering abundance and distribution of pests and pathogens, and the variations in crop quality and yield as well as the opportunities for sequestration (sequestration is the process by which GHG emissions are stored; opportunities include forests and underground storage).
- 3) The impact on California's 1,100 miles of coastline. This effort will focus on both the changes in the coastline from sea level rise and the economic impacts on communities on the coast.
- 4) The impact on public health. This effort will focus on the effects on human health of increased heat stress and related deaths, changes in the incidence of infectious disease and higher risk of respiratory and other adverse health consequences of deteriorating air quality.
- 5) **The impact on forestry.** This effort will focus on the affects of reduced water supply, pest infestation and fire hazards on the forestry industry in California.

For each of the five impacts evaluated, emission reduction plans by sector and plans for how best to adapt to the effects of climate change on the sector will be developed. Funding needs and strategies for these plans will be considered.